

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims

Claim 1 (Currently Amended): A method of testing a memory device for determining operating life with stressing, comprising:

 cycling through each address of the memory device by generating a respective bit pattern comprised of a predetermined number of bits including row and column address bits for each address;

 applying stressing signals on a respective at least one cell of the memory device corresponding to each generated address in the cycling;

 wherein each of all possible row and column addresses of all of the row and column address bits is cycled through for application of the stressing signals;

 performing the cycling and the applying of the stressing signals for a predetermined stress time period; and

 minimizing charge gain failure in the memory device after the predetermined stress time period with a transition of less than the predetermined number of bits for sequencing to each subsequent address during the cycling through of each of all possible row and column addresses of all of the row and column address bits.

Claim 2 (Previously Presented): The method of claim 1, further comprising:

 cycling through the respective bit pattern for each of the addresses in a gray code

sequence.

Claim 3 (Previously Presented): The method of claim 2, wherein the memory device is a flash memory device.

Claim 4 (Previously Presented): The method of claim 3, wherein the stressing signals include a clock signal applied on a respective word line corresponding to each generated address, and include a bit line voltage applied on a respective at least one bit line corresponding to each generated address.

Claim 5 (Previously Presented): The method of claim 2, further comprising: generating a respective binary bit pattern for each of the addresses; converting the respective binary bit pattern to a respective gray code bit pattern for each of the addresses; and using the respective gray code bit pattern for the cycling.

Claim 6 (Previously Presented): The method of claim 2, further comprising: heating the memory device during the predetermined stress time period for HTOL (high temperature operating life) testing of the memory device.

Claim 7 (Previously Presented): The method of claim 1, further comprising: cycling through the respective bit pattern for each of the addresses with a transition of a

fixed number of bits for sequencing to each subsequent address.

Claim 8 (Previously Presented): The method of claim 1, wherein the memory device is a flash memory device.

Claim 9 (Previously Presented): The method of claim 8, wherein the stressing signals include a clock signal applied on a respective word line corresponding to each generated address, and include a bit line voltage applied on a respective at least one bit line corresponding to each generated address.

Claim 10 (Previously Presented): The method of claim 1, further comprising: heating the memory device during the predetermined stress time period for HTOL (high temperature operating life) testing of the memory device.

Claim 11 (Currently Amended): A system for testing a memory device for determining operating life with stressing, comprising:

an address generator for cycling through each address by generating a respective bit pattern comprised of a predetermined number of bits including row and column address bits for each address;

signal generators for generating stressing signals applied on a respective at least one cell of the memory device corresponding to each generated address in the cycling;

wherein each of all possible row and column addresses of all of the row and column

address bits is cycled through for application of the stressing signals;

and wherein the cycling and the applying of the stressing signals are performed for a predetermined stress time period; and

means for minimizing charge gain failure in the memory device after the predetermined stress time period with a transition of less than the predetermined number of bits for sequencing to each subsequent address during the cycling through of each of all possible row and column addresses of all of the row and column address bits.

Claim 12 (Previously Presented): The system of claim 11, further comprising:
a gray code converter for cycling through the respective bit pattern for each of the addresses in a gray code sequence.

Claim 13 (Previously Presented): The system of claim 12, wherein the memory device is a flash memory device.

Claim 14 (Previously Presented): The system of claim 13, wherein the signal generators include:
a clock signal generator for generating a clock signal applied on a respective word line corresponding to each generated address; and
a bit line voltage generator for generating a bit line voltage applied on a respective at least one bit line corresponding to each generated address.

Claim 15 (Previously Presented): The system of claim 12, wherein the address generator generates a respective binary bit pattern for each of the addresses, and wherein the gray code converter converts the respective binary bit pattern to a respective gray code bit pattern for each of the addresses, and wherein the system further comprises:

address decoders for decoding the respective gray code bit pattern for determining the respective at least one memory cell to have the stressing signals applied thereon.

Claim 16 (Previously Presented): The system of claim 12, further comprising:
a heater for heating the memory device during the predetermined stress time period for HTOL (high temperature operating life) testing of the memory device.

Claim 17 (Previously Presented): The system of claim 11, further comprising:
means for cycling through the respective bit pattern for each of the addresses with a transition of a fixed number of bits for sequencing to each subsequent address.

Claim 18 (Previously Presented): The system of claim 11, wherein the memory device is a flash memory device.

Claim 19 (Previously Presented): The system of claim 18, wherein the signal generators include:
a clock signal generator for generating a clock signal applied on a respective word line corresponding to each generated address; and

a bit line voltage generator for generating a bit line voltage applied on a respective at least one bit line corresponding to each generated address.

Claim 20 (Previously Presented): The system of claim 11, further comprising:
a heater for heating the memory device during the predetermined stress time period for HTOL (high temperature operating life) testing of the memory device.